INPATIENT MEDICATIONS (IM)

TECHNICAL MANUAL / SECURITY GUIDE

Version 5.0
December 1997

(Revised December 2003)

Department of Veterans Affairs
VIST**A** Health Systems Design and Development

Revision History

The table below lists changes made since the initial release of this manual. Each time this manual is updated, the Title Page lists the new revised date and this page describes the changes. Either update the existing manual with the Change Pages Document, or replace it with the updated manual.

Note: The Change Pages Document may include unedited pages needed for two-sided copying. Only edited pages display the patch number and revision date in the page footer.

Date	Revised Pages	Patch Number	Description
12/03	i-ii, 5, 75	PSJ*5*119	Updated Revision History page to reflect new text preceding the table created by the technical writers for clarity, which is unrelated to this patch.
			Updated section 2.2.1. Fields from the PHARMACY SYSTEM file (#59.7): Added the ROUND ATC PICK LIST UNITS field, which allows rounding of fractional units per dose.
			Updated section 12.1 Pharmacy Set Up: Deleted reference to Unit Dose Medications User Manual.
07/03	Title, i, 6-14, 21-23, 86-90, 118-122, 126-135	PSJ*5*80	Updated the Title Page and Revision History Page. Several parameter descriptions are expanded including The INPATIENT PROFILE ORDER SORT parameter, LVPS GOOD FOR HOW MANY DAYS, HYPERAL GOOD FOR HOW MANY DAYS, PBS GOOD FOR HOW MANY DAYS, SYRNS GOOD FOR HOW MANY DAYS, and CHEMO'S GOOD FOR HOW MANY DAYS parameters. Updated the Routine listing to include new routines. Cosmetic changes made to keep the lines of the Integration Agreements together. The default Start and Stop Date/Time for complex orders did not reflect the duration entered through CPRS and is now included. Included pages for double-sided printing.
04/03	Title, i, 6, 8-13	PSJ*5*95 & Developer Request	Updated the Title Page and Revision History Page. Updated the NOW explanation in the DEFAULT START DATE CALCULATION. Added the new Inpatient Ward Parameter, PRE-EXCHANGE REPORT DEVICE.
01/03	Title, i, 21-24, 34, 47, 91, 92, 92a, 92b	PSJ*5*85	Updated the Title Page and Revision History Page. New routines, protocols, and IAs were added. The *Barcode ID – Return and Destroy (IV)* option was included. Also included pages for double-sided printing.
05/02	All	PSJ*5*58	Updated this manual to include the IV functionality and BCMA – CPRS Med Order Button enhancements released with the BCMA V. 2.0 project.
01/02	i, ii, 35, 36	PSJ*5*65	Updated Revision History Page. The exported options list was updated to include the Free Text Dosage Report. Included pages for double-sided printing.

Date	Revised Pages	Patch Number	Description
01/02	Title, i, ii, 5, 6, 7, 8, 9, 10, 69, 70, 95, 96, 97, 98	PSJ*5*63	Updated the Title Page, and Revision History Page. The Ward and System Parameters were updated to include the new parameters for determining the stop date for one-time orders. A new database integration agreement was added. Included pages for double-sided printing.
09/01	All	PSJ*5*50	Added this Revision History Page. Re-formatted the manual into sections. Added Patch Release changes and Pharmacy Ordering Enhancements (POE).
12/97			Original Released Technical Manual / Security Guide.

- **NON-FORMULARY MESSAGE -** This is a message that will be shown to non-pharmacists when they order drugs not currently stocked by the pharmacy. This is typically a warning, and describes a procedure the non-pharmacist must follow before the pharmacy will dispense the non-formulary drug.
  - **EDIT Option -** This option is used to edit the NON-FORMULARY MESSAGE above.

- **PRINT 6 BLOCKS FOR THE PRN MAR -** This field is used to indicate if 4 or 6 blocks are to be used for ONE-TIME/PRN (pro re nata – Latin for "as needed") orders on the 7/14 DAY MAR ONE-TIME/PRN SHEET. The 7/14 DAY MAR ONE-TIME/PRN SHEET will print 4 blocks if this field is not set to **YES**.

- **PRINT DIET ABBR LABEL ON MAR** - If this field contains a 1 or YES, the Dietetics Abbreviated Label will be printed on the MAR.

- **MAR SORT -** If this field contains a **0**, the MAR will be sorted by the order's Schedule Type* and then by Medication Names. When this field contains a **1**, the MAR will be sorted by the order's Medication Names.

  * Schedule Type is sorted based on the following orders:

Continuous MAR	One-Time/PRN MAR
Unit Dose Orders:	Unit Dose Orders:
Continuous	One-time
Fill on Request	PRN
IV Orders:	IV Orders:
Piggyback or Syringe type	One-time
Admixture type	PRN
Hyperal type	Acknowledged Pending PRN orders
Chemo type	
Acknowledged Pending Orders:	
Inpatient Meds	
IV fluids	

- **ATC SORT PARAMETER -** This parameter allows sending of the Pick List to the Automated Tablet Counter (ATC) machine by ATC mnemonic or admin time within patient.

- **CALC UNITS NEEDED PRN ORDERS -** This field controls whether or not the units needed will be calculated for the orders with PRN in the SCHEDULE field (#26) of the UNIT DOSE sub- file (#55.06) of the PHARMACY PATIENT file (#55) on the Pick List. This information will show on the Pick List if this field is set to 1.

- **DAYS UNTIL STOP FOR ONE-TIME -** This field indicates the number of days a one-time order should last. This field is only used if the ward parameter, DAYS UNTIL STOP FOR ONE-TIME, is not defined. This number can be between 1 and 30.

- **ROUND ATC PICK LIST UNITS** – This field allows the site to decide whether or not fractional units per dose will be rounded to the next whole number before the pick list is sent to the ATC.

2.2.2. Fields from the INPATIENT WARD PARAMETERS file (#59.6)

Note: Fields from the INPATIENT WARD PARAMETERS file (#59.6) are still edited through the Inpatient Medications package.

- **WARD -** This is a ward for which the site wants to tailor specific aspects of the Inpatient Medications package.

- **DAYS UNTIL STOP DATE/TIME -** This is the number of days a standard order should last. The first order entered for a patient uses this number to calculate a default value for the order's STOP DATE/TIME field (#34) of the UNIT DOSE sub-file (#55.06) of the PHARMACY PATIENT file (#55). This number is also used if SAME STOP DATE ON ALL ORDERS parameter has no entry, or an entry of **NO**.

- **DAYS UNTIL STOP FOR ONE-TIME -** This is the number of days a one-time order should last. The number can be from 1-100, however, it cannot exceed the number of days that standard orders last (DAYS UNTIL STOP DATE/TIME). When this parameter is not available, the system parameter, DAYS UNTIL STOP FOR ONE-TIME, will be used to determine the stop date. When neither parameter has been set, one-time orders will use the ward parameter, DAYS UNTIL STOP DATE/TIME, to determine the stop date instead of the start and stop date being equal.

- **SAME STOP DATE ON ALL ORDERS -** This flag, if set to **YES**, uses the STOP DATE/TIME field (#34) of the UNIT DOSE sub-file (#55.06) of the PHARMACY PATIENT file (#55) from the patient's first order as a default value for these fields on all of the patient's following orders.

- **TIME OF DAY THAT ORDERS STOP -** This is a time of day that, if found, is used in calculating the default value for the STOP DATE/TIME field (#34) of the UNIT DOSE sub-file (#55.06) of the PHARMACY PATIENT file (#55) of patients' orders. This time is in military time format with leading and trailing zeros (0001 means 1 minute after midnight).

- **DEFAULT START DATE CALCULATION –** When an order originates in CPRS and a duration accompanies the order, this field is used to calculate the Calc Start Date/Time. Otherwise, this field allows the ward to determine how the default Start date for orders should be calculated. The default may use the NEXT ADMIN TIME, the CLOSEST ADMIN TIME, or the login date/time of the order (NOW) as the default Start Date for Unit Dose and IV orders.

- **START TIME FOR 24-HOUR MAR -** This is the start time for the 24-hour MAR. It is used whenever a user enters a start date without a time when running the 24-hour MAR. This time is in military time format with leading and trailing zeros (0001 means 1 minute after midnight).

12. Interfacing with the ATC

This initial version of Inpatient Medications includes an interface between the Unit Dose Medications module and the Automatic Tablet Counter (ATC) Unit Dose Dispensing machine. The Unit Dose Medications module currently allows the users to send their pick lists to the ATC. The interface allows for multiple ATCs, tying the ATCs to ward groups.

Note: If a site elects to send Pick Lists to the ATC machine by ADMIN TIME, the following change must be made to the ATC machine parameter:

> At the password screen, enter <**F8>** for system parameter. Move over to the SORT parameter. The choices will be Time or Medication. Select Medication and press **<Enter>**.

12.1. Pharmacy Set Up

In order to send medication orders to the ATC, the Pharmacy must determine the Dispense Drugs that can be sent to the ATC and the pharmacy ward groups that will be sending pick lists to the ATC. This can be done before the ATC is set up or even delivered.

12.1.1. Drug Set Up

For each drug that the pharmacy determines can be sent to the ATC, the pharmacy must enter a MNEMONIC, and enter a CANISTER NUMBER for each pharmacy ward group that will be sending the drug to an ATC. This can be assigned through the *Dispense Drug/ATC Set Up* [PSSJU DRUG/ATC SET UP] option. This option is no longer part of the Unit Dose *Supervisor's Menu* [PSJU FILE]. It is sent out with the PDM package as a stand-alone option. This option should be added to the menu of designated users on an as needed basis.

The pharmacy must also enter each drug into the ATC's software, giving each drug the same mnemonic entered into the PDM package.

12.1.2. Ward Group Set Up

For each ward group that will be sending to the ATC, the device name given to the ATC must be entered into the WARD GROUP file (#57.5). This can be assigned through the *Ward Groups* [PSJU EWG] option found within the Unit Dose *Supervisor's Menu* [PSJU FILE].

12.2. Hardware Set Up

In order for the pharmacy to be able to send Unit Dose Medications orders to the ATC, the ATC must be set up as a device in the system. The ATC should be set up similar to a printer, but must be set up for two-way communication. Some of these corresponding settings must also be made in the ATC setup software. The following examples are provided to guide the user in this set up. Please note that they are only examples and may not hold true in all cases.

12.2.1. Device File Example

The following is an example of a DEVICE file (#3.5) entry for the ATC. (The entry for the $I field will more than likely be different at each site.) Only those fields to which data is entered are shown.

Example: Device File Entry for the ATC

```
LOCATION OF TERMINAL: ATC
$I: 142

TYPE: TERMINAL
SUBTYPE: C-OTHER
DEFAULT SUBTYPE: C-OTHER//   <Enter>
ASK DEVICE: YES//   <Enter>
ASK PARAMETERS: YES// N    (NO)
MARGIN WIDTH: 80//  255
FORM FEED: #//  <Enter>
PAGE LENGTH: 66//  <Enter>
```

12.2.2. MUX Table Example

The following is a Digital Standard MUMPS (DSM) example of a Multiplexer (MUX) table entry for the ATC. Please note that OUTPUT ONLY is set to NO.

```
Enter device number, or range of device numbers (NN:NN). Enter <CR> when done.
        Parity Auto          Modem   Output     Stall    Lower
          |     Baud         Cntrl   only Count          Case
          |   |    |           |       |         |         |
Device  |CRT |  Rcvr Xmit  |ZUSE  | Login | Tab    |Output   Rtn    Edit
Number  | |  | Spd  Spd    |  |   |  |    |  |      |Margin   num    Comment
----------------------------------------------------------------------------
142      N Y   N 9600 9600  N  N    N    N    0  Y       Y     255     2 N
142      N Y   N 9600 9600  N  N    N    N    0  Y       Y     255     2 N
```